

## **REVISED DRAFT**

### **"Statement of Findings" for**

### **OUs 3, 4, 7 and 9 Site Characterization Work in Floodplains**

## **INTRODUCTION**

On XXXXXXXX XX, 1992, the Department of Energy (DOE) published a "Notice of Involvement in Floodplains" regarding its intent to undertake site characterization activities in floodplains at its Rocky Flats Plant (RFP) north of Golden, CO. This work is being undertaken as part of clean-up actions under the Comprehensive Environmental Response, Compensation and Liability Act and the Resource Conservation and Recovery Act. The site characterization involves sampling of soil, sediments, surface water, ground water, air, flora and fauna to establish the presence and identify the nature and extent of contaminants, if any. The site characterization activities covered in this document are those within a floodplain in operable units (OUs) 3 (Off-site Areas), 4 (Solar Evaporation Ponds), 7 (Present Landfill) and 9 (Original Process Waste Lines).

## **PROJECT DESCRIPTION**

The site characterization work that will take place in floodplains consists of the following

Six vertical soil profile trenches, each approximately 9 feet long, 5 feet wide and 4 feet deep, will be dug by backhoe in OU 3 to obtain soil samples. Such trenches are typically dug and backfilled in a day. Approximately 1,500 two-to-three tablespoon soil samples will be taken from the top one-quarter inch of ground at locations within 12 miles of RFP as part of the OU 3 program. Approximately 35 soil samples will be collected from a depth of up to one inch at sites in OU 4. Soil samples will be taken from depths of 2-to-3 inches at 12 locations in OU 7.

Sediment samples will be taken from the bottoms of streams, ditches, ponds and reservoirs at or near RFP for the OU 3 and OU 7 programs. Surface water samples will be obtained from various water bodies on and near the Plant for OU 3 and OU 7. Ground water samples will be collected from new and existing monitoring wells for OU 3 on and off the RFP site. A total of eight wells/boreholes will be drilled to obtain ground water and/or soil samples in OUs 3 and 4. Typical wells and boreholes are 6 inches in diameter and 15 to 60 feet deep, though some may be deeper.

Also at OU 3, air sampling and meteorological monitoring stations will be established and operated. Two air sampling stations and 2 six-meter meteorological towers will be located in the environs of Standley Lake, southeast of RFP, for the OU 3 program. Tests will be conducted with small and medium-sized portable wind tunnels on exposed areas of the Standley Lake bed to identify the ability of winds at various speeds to pick up and transport exposed sediments.

Samples of flora and fauna will be collected at various locations in OUs 3, 4, 7 and 9. A radiological survey will be conducted in the area of OU 4 using hand-held instruments. Finally, excavations may be made in the South Walnut Creek floodplain to locate and investigate possible buried pipelines as part of OU 9.

## **NECESSITY OF LOCATING IN A FLOODPLAIN**

Some of the activities that constitute these projects must, by their nature, be undertaken in a floodplain, including sediment and surface water sampling and the wind tunnel tests. The locations of other activities are dictated by the scientific needs of the project. Sampling, including drilling wells and boreholes and

digging soil sample pits, has to take place in locations that will provide the information the project seeks to develop. These locations are a function of contaminant location, direction of movement, terrain, geology, subsurface hydrology, locations of surface water bodies and a variety of other factors. Avoiding activity in floodplains altogether would so seriously compromise the results of the projects that it is doubtful of sound environmental remediation activities could be developed based on them.

#### **LIST OF ALTERNATIVES CONSIDERED**

No Action

#### **CONFORMANCE WITH APPLICABLE LOCAL FLOODPLAIN REGULATIONS**

The activities are consistent with the guidelines provided by Section 42 of the Jefferson County, Colorado, zoning regulations. The State of Colorado defers regulation of floodplains to local governments.

#### **MITIGATION MEASURES**

Because of the negligible impacts of the proposed action to floodplains, few steps are needed to mitigate potential harm. Where a drilling site can be relocated out of a floodplain while still maintaining the integrity of the sampling program, the drilling site will be relocated. Travel within floodplains will be restricted to established roads and tracks where they are available.

rev 1/23/92